Applicant: Stephen A. Rago Attorney's Docket No.: 07072-133001 / CS-002

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## **REMARKS**

## Section 102 rejection

The Examiner appears to agree that *Soltis* discloses a system with no server. However, in almost the same breath, the Examiner states that even though *Soltis* discloses a system with no server, in fact, *Soltis* discloses a system with possibly dozens of servers because each client 105 functions as a server. As a basis for this position, the Examiner offers the following statement:

Soltis discloses that his system merely eliminates the need for expensive server hardware. This does not mean that his system is void of all types of server. 1

The Examiner's position appears to be that although *Soltis* eliminates "expensive server hardware," it does not preclude its converse, which is "cheap" server hardware.

Soltis' statement about the elimination of "expensive" server hardware is consistent with having "cheap" servers. But it is just as consistent with having no servers at all. Because this statement by itself is inconclusive, it is necessary to examine what else Soltis has to say about servers.

Applicant draws attention to numerous passages in *Soltis* that favor the latter interpretation over the former. For example, in summarizing the disadvantages of having a server, *Soltis* makes no particular distinction between "cheap" and "expensive" servers:

Using the server to maintain data consistency has several drawbacks. First, a server limits how fast data can be transferred across the network when it controls access to shared storage device. The speed at which data is obtained from the shared storage device is limited by the speed of the server. Second, a server-based architecture is susceptible to server failures. Such an architecture is not robust, because a server failure prevents all clients from accessing any of the storage devices controlled by the server. Third, maintaining a separate server for controlling access to shared storage devices adds additional complexity and expense to the system.<sup>2</sup>

Except for perhaps the disadvantage concerning expense, these enumerated disadvantages do not go away simply by using a "cheap" server. These are disadvantages that are inherent in having a server to begin with.

Office Action, July 9, 2004.

<sup>&</sup>lt;sup>2</sup> Soltis, col. 1, lines 33-44.

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Then, in summarizing the invention, Soltis states:

"A serverless system allows higher speed data transfer across a network, eliminates the risk of server failure, and reduces system cost and complexity."

Again, *Soltis* recites advantages that are inherent to a serverless system. Except for the reduction of cost, the cost of a server is irrelevant. For example, it is hardly credible to argue that using a cheap server somehow "eliminates the risk of server failure" whereas using an expensive one does not. If anything, one might expect a "cheap" server to fail more frequently than an "expensive" server.

The Examiner also urges that these cheap servers are nothing more than clients 105 of the *Soltis* system.

If a Soltis client 105 were truly a "server," one would expect it to at least serve files to clients. However, according to the following teaching of Soltis, having a client serve files to other clients would undermine the purpose of the Soltis invention by wasting the client's bandwidth:

Direct attachment of a shared storage device to a client is susceptible to the risk of that client's failure; the present invention avoids this problem. A locally attached shared storage device also wastes a local host client's bandwidth by using it to transfer data to other clients; this is also avoided by the present invention.<sup>3</sup>

This point is so important to *Soltis* that he repeats it again:

For example, the present invention does not require that the bandwidth of a local host client 105 be wasted in transferring data from a locally attached storage device to another host client 105.4

In the face of this overwhelming evidence supporting the absence of servers in *Soltis*, the Examiner clings to the notion that each client 105 in *Soltis* functions as a server.<sup>5</sup> In the absence

<sup>&</sup>lt;sup>3</sup> Soltis, col. 3, lines 55-60.

<sup>&</sup>lt;sup>4</sup> Soltis, col. 10, lines 53-56.

<sup>&</sup>lt;sup>5</sup> Office Action, July 9, 2004 "Examiner maintains that the clients of Soltis system take on the functionality of servers. Therefore the clients are also servers. This allows the clients to message to exchange information [sic] (col. 6, lines 30-45).

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of any support for this theory in *Soltis*, the Examiner has evidently sought support from another source: Applicant's claim 9. According to the Examiner, claim 9 is somehow consistent with the Examiner's position that a client 105 can be a server.

Applicant's claim 9 is not available to be cited as prior art. It is hardly proper to use Applicant's own claim as a substitute for what *Soltis* apparently fails to teach.

The Examiner has drawn attention to one passage from *Soltis* to support the proposition that the clients 105 carry out the function of a server. This passage discloses that the *Soltis* client has the ability to exchange messages. However, a great many computers can exchange messages without being servers. The ability to exchange messages is hardly the hallmark of a server. Indeed, one might just as well say that because both a client and a server can read a disk, it follows that a client is a server.

Even assuming that the clients **105** of *Soltis* were in fact servers, there is no disclosure of "block allocation for the data being performed by the server" as recited in the claim. The Examiner cites two passages in support of the proposition that *Soltis* discloses block allocation by a server: column 6, lines 30-60 and column 14, lines 40-55.

The first of these two, in column 6, discloses properties of a message-based system. It is difficult to see how the enumeration of selected properties of a message-based system discloses a server that carries out block allocation.

The second passage, in column 14, is in the context of a disk controller 705 that apparently manages the locks that are associated with the storage blocks. However, this controller 705 is not one of the clients. Hence, if as the Examiner asserts, a client is a server, then since the controller 705 is not a client, it cannot be a server.

<sup>&</sup>lt;sup>6</sup> Soltis col. 6, lines 30-45.

<sup>&</sup>lt;sup>7</sup> Soltis, col. 14, lines 6-19.

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The remaining independent claims recite limitations similar to claim 1 and are patentable for at least the same reasons. The remaining claims are dependent claims that include the limitations of their respective parent claims. These claims are patentable for at least the same reasons as the parent claims.

On the basis of the foregoing remarks, Applicant requests reconsideration and withdrawal of the section 102 rejection of all claims.

Please apply any other charges or credits to deposit account 06-1050, referencing Attorney Docket Number 07072-133001.

Respectfully submitted,

Date: Aug 31, 2005

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